Statistical Bulletin

METROPOLITAN LIFE INSURANCE COMPANY

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Health of School-Age Children

IN THE past two decades, major gains have been made in reducing mortality among children 5 to 14 years of age. The death rate dropped nearly two thirds between 1933 and 1953—from 158.0 to 57.3 per 100,000—among boys of elementary school age insured under Industrial policies in the Metropolitan Life Insurance Company. Among the girls, the downward trend in mortality was even more marked, the rate falling from 125.8 to 36.8 per 100,000. In each sex, decreases of 85 percent or more were recorded in the death rate from a number of diseases, including the principal communicable diseases of childhood, appendicitis, pneumonia and influenza, and tuberculosis.

Despite these striking achievements in life conservation, the actual number of lives lost among school-age youngsters is still large, a considerable part of it resulting from causes amenable to control. At present there are about 15,000 deaths a year among children at ages 5 to 14 in the general population of the United States. Accidents are the greatest single menace to child life, as may be seen in the table on page 2. Among the boys, accidental injury was responsible for more than two fifths of the total mortality in 1950; among the girls, the proportion exceeded one quarter. The wide disparity in the accident death rate between boys and girls—31.5 and 13.5 per 100,000, respectively—accounted for nearly the entire sex difference in the total mortality.

Malignant neoplasms (cancer and allied conditions), which two decades ago were a relatively minor cause of death among children 5 to 14 years of age, now outrank every other disease as a cause of death in this period of life. These conditions have forged ahead to their present rank not only because of the marked decrease in the mortality from the infectious diseases, but also because of the increase in the recorded death rate from cancer. The leukemias account for nearly half of all the deaths attributed to malignancy among school-age children.

Although spectacular progress has been made in the control of infectious diseases, they are still responsible for an appreciable loss of life among children. Pneumonia and influenza, and acute poliomyelitis are among the leading killers at ages 5 to 14, but the death toll from these diseases

DEATH RATES PER 100,000 FROM SELECTED CAUSES AT AGES 5 TO 14 YEARS BY SEX AND GEOGRAPHIC DIVISIONS, 1950 (BY PLACE OF RESIDENCE)

GEOGRAPHIC DIVISION	All Causes	ACCIDENTS			MALIGNANT NEOPLASMS			Diseases of Heart*	Pneumonia and Influenza	Acute Poliomyelitis	Congenital Malformations	Tuberculosis	Principal Communicable Diseases of Childhood	Appendicitis	All Other Causes
		Total	Motor Vehicle	Other	Total	Leukemia and Aleukemia	Other								
	MALES														
UNITED STATES	70.9	31.5	11.9	19.7	7.4	3.1	4.3	3.5	3.3	2.9	2.6	1.6	1.3	1.1	15.6
New England	53.8	27.0	8.7	18.3	6.1	3.2	2.9	1.7	2.5	—	2.0	.4	.7	.7	12.6
Middle Atlantic	59.8	22.1	7.8	14.3	8.3	3.7	4.6	3.5	2.8	3.6	2.9	1.4	.8	1.0	13.6
East North Central	70.9	32.4	14.5	18.0	7.8	3.4	4.4	3.6	3.0	4.5	2.8	1.5	.8	.8	13.7
West North Central	67.7	32.4	9.9	22.5	6.4	2.5	3.9	3.1	2.8	2.9	2.3	.9	1.5	1.2	14.2
South Atlantic	75.9	33.5	14.7	18.8	6.7	2.8	3.9	4.2	4.6	2.3	2.6	1.6	1.5	.8	18.1
East South Central	80.3	34.0	12.3	21.7	6.9	2.7	4.2	4.4	4.6	2.1	2.5	1.9	3.4	1.5	19.0
West South Central	79.2	36.7	11.6	25.2	6.0	2.5	3.6	3.4	4.3	3.1	2.6	1.6	1.9	1.7	17.8
Mountain	90.1	45.6	13.2	32.4	8.4	3.8	4.6	4.6	2.5	3.4	1.5	3.8	.8	1.3	18.3
Pacific	69.3	31.5	12.4	19.1	9.8	3.9	5.9	1.8	1.7	2.1	3.4	2.3	.7	.9	15.0
	FEMALES														
UNITED STATES	48.9	13.5	5.7	7.8	6.0	2.5	3.5	4.3	3.0	2.0	2.1	2.0	1.3	.9	13.6
New England	37.7	10.4	4.4	6.1	6.2	3.5	2.7	1.4	1.7	.6	2.4	.8	.3	.8	13.2
Middle Atlantic	43.0	9.6	3.7	5.9	7.1	2.5	4.6	4.8	2.7	2.0	2.1	1.4	.8	.9	11.7
East North Central	47.3	12.8	6.4	6.4	6.1	2.3	3.9	4.3	2.7	3.3	1.8	1.5	1.0	1.2	12.6
West North Central	48.0	13.8	4.8	9.1	6.2	3.1	3.2	3.6	3.2	2.0	2.0	1.5	1.4	1.1	13.1
South Atlantic	52.9	15.7	7.4	8.3	5.5	2.7	2.8	4.5	4.1	1.2	2.2	2.0	2.1	.6	15.0
East South Central	58.4	16.4	5.1	11.3	5.0	1.9	3.1	6.4	3.9	.9	1.9	2.4	3.0	1.0	17.5
West South Central	52.7	16.4	6.2	10.2	4.5	1.5	3.1	3.9	3.3	3.2	2.4	3.1	1.0	.8	14.2
Mountain	63.3	18.2	9.2	9.0	6.1	3.3	2.8	7.7	3.9	.9	2.4	6.8	2.8	.7	13.8
Pacific	43.7	12.3	5.8	6.5	7.0	3.3	3.7	2.3	1.4	1.6	2.0	1.9	.6	1.1	13.5

*Includes rheumatic fever.
Source of basic data: National Office of Vital Statistics, *Vital Statistics of the United States, 1950*, Vol. III, Table 56.

varies from year to year with their prevalence and virulence. Tuberculosis and the principal communicable diseases of children, while continuing their long-term downward trend, are still far from negligible causes of death among youngsters. Moreover, most of the deaths from heart disease among children in this age range are of infectious origin.

The mortality among school-age children shows considerable geographic variation, as the accompanying table indicates. The New England States have the best record, with a death rate about 25 percent below that for the country as a whole and about 40 percent lower than that for the Mountain States, the area with the poorest record. In view of the importance of accidents in the mortality picture at this period of life, it is not surprising that the ranking of the geographic divisions with respect to total mortality follows closely that for fatal accidents. In general, the death rates for individual diseases are also among the lowest in the New England States and among the highest in the Mountain and the Southern regions. It should be noted that the geographic distribution of poliomyelitis mortality may vary markedly from year to year.

Throughout the country, much can still be done not only to reduce further childhood mortality but also to aid the millions of youngsters handicapped by orthopedic defects, impaired sight or hearing, rheumatic fever, cerebral palsy, epilepsy, or emotional disturbance. Large numbers of these children can be rehabilitated to become useful and productive citizens through treatment and education. While further research is still needed to bring to light the factors causing many of these disabilities, parents, teachers, school administrators, the medical profession, and community health agencies can, by working together, accomplish much with existing knowledge and facilities.

New Gains in Longevity of Industrial Policyholders

THE EXPECTATION of life at birth among the Industrial policyholders of the Metropolitan Life Insurance Company, based on mortality conditions prevailing in 1953, climbed to a new high of 68.9 years. This is almost half a year greater than the figure for 1952, and climaxes a decade of successive gains during which the average lifetime of these insured persons has increased by five years.

In the long view, the average length of life of American wage-earners and their families has been rising for more than two generations, as is evident from Table 1. Based on the mortality experienced in 1879-1889, the earliest period for which data are available, the average lifetime of these policyholders was only 34 years. By 1909 the figure had increased to 46.3 years, which was a gain of one half year of life for

TABLE 1—EXPECTATION OF LIFE AT BIRTH
INDUSTRIAL POLICYHOLDERS,* METROPOLITAN LIFE INSURANCE COMPANY
1879-1889 TO 1953

Calendar Year	Expectation in Years	Calendar Year	Expectation in Years	Calendar Year	Expectation in Years
1953†	68.9	1940	62.9	1927	56.4
1952†	68.5	1939	62.5	1926	55.0
1951†	68.4	1938	61.9	1925	55.5
1950†	68.3	1937	60.7	1924	55.6
1949	67.7	1936	60.3	1923	54.5
1948	67.2	1935	60.2	1922	55.0
1947	66.5	1934	59.5	1921	55.1
1946†	65.6	1933	59.2	1919-1920	51.1
1945†	64.9	1932	58.8	1911-1912	46.6
1944†	64.4	1931	57.9	1909	46.3
1943†	63.9	1930	57.4	1879-1889	34.0
1942†	64.3	1929	55.8		
1941	63.4	1928	55.9		

Gain, 1953 since 1909, 22.6 years; since 1879-1889, 34.9 years.

*The figures for 1948 to 1953 relate to Weekly and Monthly premium-paying policies; prior to 1948 the figures pertain to Weekly policies only.

†Excludes deaths from enemy action.

TABLE 2—EXPECTATION OF LIFE AND MORTALITY AT SPECIFIED AGES
BY COLOR AND SEX. INDUSTRIAL POLICYHOLDERS,*
METROPOLITAN LIFE INSURANCE COMPANY, 1953

Age, Years	Expectation of Life in Years					Mortality Rate per 1,000				
	Total Persons	White		Colored		Total Persons	White		Colored	
		Males	Females	Males	Females		Males	Females	Males	Females
5	66.2	63.2	69.0	61.0	64.3	0.6	0.7	0.5	0.8	0.7
10	61.4	58.3	64.2	56.2	59.4	.4	.5	.3	.6	.3
15	56.5	53.5	59.3	51.4	54.5	.6	.8	.4	1.1	.7
20	51.7	48.8	54.4	46.8	49.8	1.0	1.4	.5	2.2	1.2
25	47.0	44.1	49.5	42.3	45.1	1.2	1.6	.7	2.8	1.8
30	42.3	39.5	44.7	37.9	40.5	1.4	1.7	.9	3.0	2.5
35	37.6	34.8	39.9	33.5	36.1	1.9	2.3	1.3	4.0	3.3
40	33.0	30.3	35.2	29.2	31.7	3.1	4.1	2.1	6.1	4.8
45	28.6	26.0	30.6	25.2	27.6	5.1	6.8	3.4	9.2	7.2
50	24.4	22.0	26.2	21.5	23.6	8.0	11.0	5.4	13.4	10.2
55	20.5	18.3	22.0	18.0	19.9	12.1	17.5	8.3	17.9	14.3
60	16.8	15.1	18.0	14.7	16.4	18.4	26.0	13.4	26.6	20.1
65	13.4	12.1	14.3	11.8	13.2	28.1	37.5	22.0	39.5	30.0

*Weekly and Monthly premium-paying policies.

Note: Excludes deaths from enemy action.

each calendar year—a record which has been maintained since that time.

The longevity of Industrial policyholders has increased more rapidly than that of the general population of the United States. In 1909, for example, the average length of life of Industrial policyholders was about six years less than the expectation of life of the population as a whole. In the ensuing decades, this disadvantage was gradually eliminated; currently, the two groups are on a par.

Each color and sex group among Industrial policyholders has shared in the improvement in longevity. Now, as in the past, the average lifetime is longer for females than for males, and is longer for white than for colored persons. In 1953, the expectation of life at age 5 was 69.0 years for white females, compared with 64.3 years for colored females; the corresponding figure for white males was 63.2 years and that for colored males 61.0 years.

The figures on expectation of life in 1953 are based upon the mortality rates shown in the right-hand panel of Table 2. The achievements in life conservation are underscored by the very low death rates which now prevail among children and young adults. The current death rate among Industrial policyholders as a whole is less than 1 per 1,000 at ages 3 to 19, and remains under 3 per 1,000 until age 40 and under 10 per 1,000 until age 53. Only a decade earlier, the death rates in the 20 years of life from ages 15 to 35 were about twice those currently experienced.

Over a wide span of ages—from about 10 to 65—the death rates of white male policyholders range from one and a half to more than two times those of white female policyholders. Mortality among the colored policyholders, although now relatively low in childhood, is still appreciably higher than that for the whites in early adult life. The disparity in the death rates between male and female colored policyholders, however, is not as great as among white policyholders.

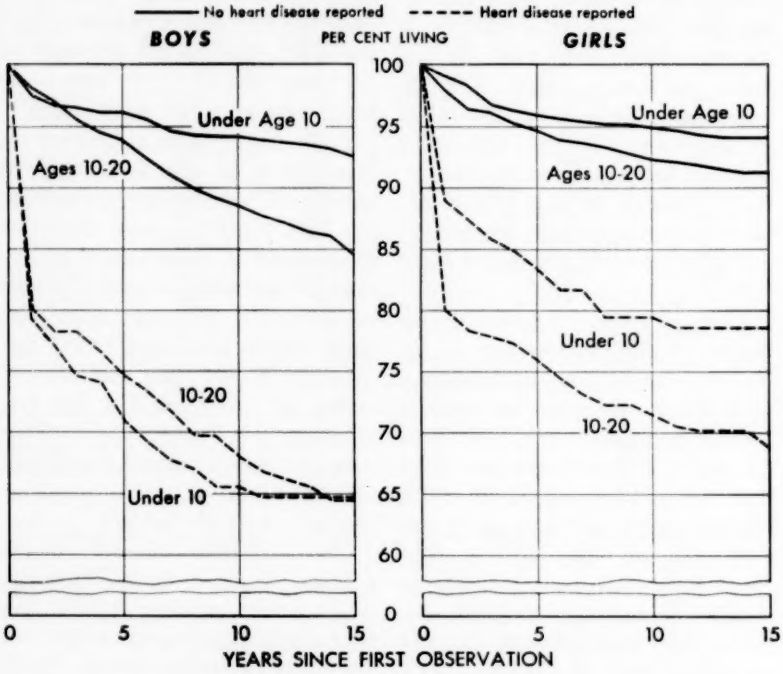
The long-term increase in the average length of life of American wage-earners and their families has been due in large measure to the control of the infectious diseases. However, the cardiovascular-renal diseases and cancer have now come to be responsible for over two thirds of all deaths. The magnitude of future gains in longevity therefore will depend chiefly on the success of the efforts being directed against these diseases.

Prognosis in Rheumatic Fever

THE MORTALITY from rheumatic fever, which has been decreasing for many years, declined even more rapidly in the past decade. This recent improvement has been due in part to general betterment in environmental and living conditions, and more particularly to the greater con-

Survivorship of Children with Rheumatic Fever

Industrial Policyholders of the Metropolitan Life Insurance Company Who Received Nursing Care for the Disease during 1936-1938, Traced to Anniversary of Discharge From Care in 1951. By Sex, Age, and Cardiac Status at First Observation



trol over streptococcal infections with sulfa drugs, penicillin, and other antibiotics. The new therapy has been useful in preventing both initial and recurrent attacks of rheumatic fever.

It is still too early to evaluate the long-term outlook for children who have suffered a first attack of rheumatic fever in recent years. Fortunately, the number of such children definitely appears to be declining. Valuable information on the outlook for patients coming under treatment 15 or more years ago is available from several recent studies based upon the experience of insured lives.

One of these is a follow-up study of the mortality among a group of nearly 3,000 children with rheumatic fever insured under Industrial policies in the Metropolitan Life Insurance Company (see chart above). These policyholders, who were in the age range from 1 to 20 years when they first received nursing care during an acute attack some time in the period 1936 to 1938, have been

systematically traced since that time. The majority of these children were still living at the end of 15 years. The maximum survivorship rate—94 percent—was recorded among girls under age 10 at the time of attack who had no evident heart disease reported at first observation. Even the minimum survivorship rate over the 15-year period, that among boys with heart disease reported during the attack, was close to 65 percent.

As might be expected, the mortality was highest in the early years after the attack, especially for those with heart involvement. For example, among boys with heart involvement the death rate in the first five years after the attack averaged 66 per 1,000, compared with 17 in the next five years and with 8 per 1,000 in the succeeding five years. In part at least, the recent improvement reflects the prevention of recurrent attacks of the disease.

The mortality among the children under study during the 15-year period was nevertheless well above normal, primarily because of the resulting heart damage. Rheumatic heart disease accounted for more than three fifths of all deaths. Among children with heart involvement in the initial attack, the proportion of deaths due to rheumatic heart disease exceeded three fourths, and was especially high among the younger children. Even among children without reported heart involvement during the acute stage, the majority of deaths occurring subsequently were due to rheumatic heart disease.

Of particular interest clinically is the record for subacute bacterial endocarditis. Altogether, 10 percent of the deaths were ascribed to this cause. The mortality from subacute bacterial endocarditis was largely concentrated in the early years of the experience. At the time this study was inaugurated, it was expected that mortality from this condition, which then invariably ran a fatal course, would increase as time went on. That this did not occur reflects, no doubt, the influence of the antibiotics both in prevention of recurrent attacks of rheumatic fever and in the treatment of subacute bacterial endocarditis. This is one of the most significant changes in the prognosis of rheumatic fever.

It may also be noted that even though the majority of the girls in this study have reached marriageable age, and a large proportion are married, there have been only two deaths from complications of pregnancy and childbirth among them. One of these deaths followed the birth of twins, an event which normally involves extra risk to the mother.

Data on the outlook for adults with heart impairment of probable rheumatic origin are available from the experience of a large number of Life insurance companies during the period 1935-1950.* Among persons limited to substandard insurance because of mitral regurgitation (leakage of the mitral valve of the heart), with a history of rheumatism or

*1951 Impairment Study, published by the Society of Actuaries, April 1954.

streptococcal infection, the mortality was about 2⅔ times that of standard insured risks. For persons who also had a slightly enlarged heart, the mortality was 3¾ times that of standard risks.

The various studies of rheumatic fever indicate that the prognosis of the disease has improved, with prospects of complete recovery in a high proportion of cases. Early diagnosis and proper treatment are still of prime importance for a favorable outcome. Even persons with severe heart damage resulting from rheumatic fever are now being treated successfully. Surgical correction of such defects is becoming increasingly frequent, and a growing number of patients with rheumatic heart disease are being restored to health and working capacity. For some time now cortisone and ACTH have been under careful trial in the treatment of rheumatic fever. It is hoped that this hormonal treatment will prove effective in lessening or preventing permanent heart damage from rheumatic fever, but this therapy awaits definitive evaluation. Extensive research currently being conducted on rheumatic fever may be counted upon to increase our knowledge of the natural history and management of this disease which still remains an important cause of disability and death from childhood up to middle adult life.

Age and Occupation

EACH MAJOR occupation includes people in a wide range of ages, but in some occupations young workers predominate, while in others older people are in the majority. For example, the 1950 Census showed that half of the men employed as farm workers were under 27 years of age, whereas the median age for tailors and furriers was 53.4 years. The median age for all the 40,500,000 men employed in our country at the time of the census was 39.7 years. For the 15,700,000 employed women the median age was 36.4 years, while that for the large occupational group of stenographers, typists, and secretaries was 25.8 years. The details are given in the table on page 9.

Young men constitute a substantial proportion of the employees in some occupations which require relatively little training or experience. For instance, in 1950 more than two fifths of the automobile service station and parking attendants were under 25 years of age, compared with about 15 percent for employed males as a whole; many of these attendants, in time, advance to more skilled jobs in the same field, such as automobile mechanics. Relatively young men also comprise a majority of the workers in a variety of strenuous occupations. Representative of this group are linemen and servicemen employed in electric power, telephone, and telegraph industries, whose jobs frequently entail climb-

MEDIAN AGE AND AGE DISTRIBUTION OF EMPLOYED PERSONS IN MAJOR OCCUPATIONS BY SEX. UNITED STATES, APRIL 1950

OCCUPATION	Median Age	Number Employed, in Thousands	PERCENT IN SPECIFIED AGE GROUP (Years)						
			14-19	20-24	25-34	35-44	45-54	55-64	65 and Over
Employed males, total	39.7	40,510	4.9	9.7	24.4	23.6	18.8	13.0	5.6
Accountants and auditors	39.3	321	.3	6.8	31.5	26.5	19.8	11.6	3.5
Attendants, auto service and parking	27.3	229	17.7	24.3	28.5	15.3	7.9	4.3	2.0
Barbers, beauticians, etc	47.7	193	.6	4.6	15.3	22.5	26.1	21.3	9.6
Brickmasons, tile setters, and stone-cutters	40.5	173	2.2	10.7	25.4	21.4	19.7	14.8	5.8
Bus drivers	38.5	150	1.3	5.8	31.9	31.1	19.0	9.2	1.7
Carpenters	43.6	908	1.6	6.6	22.1	23.0	21.2	18.0	7.5
Clerical workers (total)	36.4	2,603	5.3	14.2	27.6	21.1	16.5	11.3	4.0
Mail carriers	40.4	162	.7	7.9	28.9	23.2	20.8	15.3	3.2
Electricians	39.3	307	.9	8.2	29.1	27.4	22.0	10.4	2.0
Engineers, technical									
Aeronautical	32.9	17	.1	6.2	55.7	27.2	7.8	2.6	.4
Civil	41.8	121	.3	6.0	25.0	27.3	22.6	14.1	4.7
Electrical	37.6	105	.2	7.2	35.5	27.2	20.0	8.4	1.5
Mechanical	38.7	110	.1	5.3	35.2	25.2	19.4	11.6	3.2
Other technical	37.7	165	.1	4.9	37.2	28.9	17.5	9.1	2.3
Farmers and farm managers	45.1	4,190	1.5	5.2	18.7	22.7	21.0	18.4	12.5
Farm laborers and foremen	26.6	1,950	29.2	17.4	17.7	13.0	9.8	7.5	5.4
Firemen (fire protection)	38.9	109	.2	5.7	32.3	30.3	20.3	9.7	1.5
Janitors and porters	49.4	607	4.9	6.2	13.3	16.7	20.4	23.1	15.4
Lawyers and judges	44.5	174	*	.9	19.7	30.8	23.5	14.4	10.7
Linemen and servicemen—telephone, telegraph, and power	31.0	208	2.1	19.3	40.6	18.1	13.8	5.6	.5
Lumbermen, raftsmen, and woodchoppers	35.3	170	10.1	15.2	24.0	22.1	16.1	9.5	3.0
Machinists and job setters	41.1	529	.8	6.0	27.6	25.6	21.5	14.6	3.9
Manufacturing plant operatives	36.4	3,191	4.7	13.8	28.2	23.3	16.0	10.8	3.2
Mechanics and repairmen—auto	35.2	647	2.3	11.9	35.3	28.0	16.1	5.5	.9
Mechanics and repairmen—other	38.9	1,069	1.6	9.1	29.0	26.1	18.7	11.8	3.7
Miners	37.7	569	2.7	12.1	28.1	26.1	18.2	11.1	1.7
Painters (construction), paper hangers, and glaziers	43.6	410	2.0	6.6	19.7	25.1	23.4	16.5	6.7
Physicians and surgeons	42.9	180	*	1.7	25.4	29.0	19.9	12.9	11.1
Plumbers and pipe fitters	41.3	276	.9	6.4	25.4	27.7	22.0	13.9	3.7
Policemen, sheriffs, and marshals	41.1	213	.1	4.7	28.7	26.9	22.9	12.3	4.4
Printers	39.7	250	2.7	10.7	24.2	26.1	19.4	12.7	4.2
Proprietors and officials (except farm)	44.7	4,341	.4	3.1	18.9	28.4	26.0	16.7	6.5
Railroad workers (steam)									
Brakemen and switchmen	40.6	139	.5	6.9	28.7	24.7	20.1	15.9	3.2
Locomotive engineers	55.2	72	*	.6	7.1	11.6	29.8	40.4	10.5
Locomotive firemen	37.3	54	.4	7.0	36.0	28.5	17.9	8.7	1.5
Sales workers (total)	37.1	2,597	8.1	10.4	26.9	21.9	16.8	10.9	5.0
Stationary engineers	45.6	213	.4	4.1	19.1	24.9	25.8	19.3	6.4
Tailors and furriers	53.4	76	.8	3.8	12.9	14.8	21.1	30.1	16.5
Taxicab drivers and chauffeurs	38.8	199	1.3	10.1	28.1	27.7	21.6	9.3	1.9
Teachers	38.4	381	.3	7.1	32.9	28.7	18.7	9.6	2.7
Toolmakers, diemakers, and setters	40.8	*152	.5	4.1	30.4	25.8	20.7	14.7	3.8
Truck drivers and deliverymen	34.0	1,555	5.4	14.7	33.1	26.7	13.9	5.1	1.1
Waiters, bartenders, and counterworkers	38.4	341	7.3	10.6	23.8	24.2	18.6	11.8	3.7
Welders and flame-cutters	36.4	251	1.5	9.4	34.4	33.1	15.4	5.4	.8
Employed females, total	36.4	15,715	8.1	15.2	23.4	23.3	17.5	9.5	3.0
Beauticians and manicurists	35.0	190	3.1	12.4	34.5	29.8	14.4	4.8	1.0
Bookkeepers and cashiers	32.7	740	8.9	20.5	26.0	22.9	14.9	5.6	1.2
Clerical—general	30.7	1,709	10.6	23.1	25.4	19.6	14.0	6.0	1.3
Cooks (except private household)	45.1	242	1.7	4.3	15.7	28.0	27.7	18.3	4.3
Household (private) workers—living in	47.4	203	6.9	8.5	13.1	16.6	20.4	20.9	13.6
Household (private) workers—living out	40.3	1,131	10.3	8.1	19.2	23.5	20.1	13.1	5.7
Laundry and dry cleaning operatives	38.2	288	5.8	11.6	24.0	26.7	19.0	10.3	2.6
Manufacturing plant operatives	35.7	2,215	5.9	13.9	28.3	26.5	16.5	7.5	1.4
Nurses (except practical)	32.0	463	8.0	22.3	25.8	20.5	13.7	7.5	2.2
Proprietors and officials (except farm)	44.7	677	.9	4.2	16.4	29.3	27.7	15.8	5.7
Sales workers (total)	37.3	1,330	13.0	12.0	19.5	23.9	19.0	9.9	2.7
Stenographers, typists, and secretaries	25.8	1,501	10.7	28.0	29.0	17.5	10.5	3.6	.7
Teachers	41.2	864	.9	11.4	19.6	29.3	24.5	11.8	2.5
Telephone operators	29.3	342	11.5	27.1	21.2	19.7	14.9	5.0	.6
Waitresses, counterworkers, etc	30.8	603	14.8	17.5	30.2	22.9	10.2	3.7	.7

*Less than .05.

Source of basic data: Bureau of the Census, *1950 Census of Population*, P-C1, Table 127.

ing and exposure to all kinds of weather. More than three fifths of the linemen and servicemen were under 35 years of age according to the census. A like proportion of the aeronautical technical engineers were at these ages, the youthfulness of this group being related to the comparative newness of the occupation.

On the other hand, there are a number of widely different occupations in which the typical worker is past age 40. Outstanding is the situation among railroad locomotive engineers, where positions are generally filled by promotion of qualified firemen on a strict seniority basis. Locomotive engineers usually continue at the same work for as long as they are physically able. In consequence, more than half of them have passed their 55th birthday. The median age for men practicing law and medicine is likewise higher than that for employed men as a whole, because of the time necessary for professional men to complete their education and training, and also because a relatively large proportion of them continue to work past the usual retirement age. In 1950, the median age for lawyers and judges was 44.5 years, and for physicians and surgeons 42.9 years.

Men at ages 40 and over constituted the majority among the skilled craftsmen, such as carpenters, brickmasons, machinists, painters and paper hangers, plumbers, stationary engineers, and tool and diemakers. These well-trained men with high skills developed over years of training as apprentices, handymen, or helpers do not usually leave their occupations. Often, too, these men are self-employed, which tends to keep them working past age 65. In contrast, men in the semi-skilled manufacturing plant occupations generally enter such fields at earlier ages and are much more likely to change occupations.

Special circumstances influence the age composition of men employed as policemen and firemen. Their pension plans usually permit retirement at a lower age than for men in industry generally. Approximately four fifths of the policemen and firemen are in the ages from 25 through 54 years; for employed men as a whole, the proportion is two thirds.

Women enter and leave the labor force at an earlier age than men. In 1950, almost one fourth of the employed females were under age 25, compared with 15 percent of the men. On the other hand, only one eighth of the women workers were aged 55 and over; among men, the corresponding proportion was almost one fifth. Office workers and telephone operators were among the youngest groups; household workers and cooks were among the groups with the highest median age.

DEATH RATES FROM SELECTED CAUSES
INDUSTRIAL POLICYHOLDERS, METROPOLITAN LIFE INSURANCE COMPANY
JULY 1954

CAUSE OF DEATH	ANNUAL RATE* PER 100,000 POLICYHOLDERS†				
	JULY		YEAR-TO-DATE		
	1954	1953	1954	1953	1952
All Causes—Total	595.0	676.0	646.6	671.4	678.6
—Excluding war deaths	594.4	673.3	642.1	669.3	676.1
Tuberculosis (all forms)	8.9	9.9	9.6	11.1	15.9
Tuberculosis of respiratory system	8.2	8.9	8.7	9.9	14.5
Syphilis	2.4	2.6	2.6	2.8	2.9
Communicable diseases of childhood	.5	.4	.4	.4	.7
Acute poliomyelitis	.5	.9	.2	.5	.3
Malignant neoplasms	125.3	133.1	128.9	125.9	126.3
Digestive system	47.1	48.1	47.2	44.7	46.9
Respiratory system	15.7	16.9	16.3	15.5	14.0
Diabetes mellitus	13.8	17.1	15.1	16.3	14.8
Diseases of the cardiovascular-renal system	301.1	350.4	339.6	359.0	360.9
Vascular lesions, central nervous system	61.3	73.6	65.7	70.0	72.6
Diseases of heart	215.3	247.3	246.5	260.5	258.1
Chronic rheumatic heart disease	11.2	11.4	12.8	13.6	14.1
Arteriosclerotic and degenerative heart disease	161.0	186.0	184.9	194.1	188.0
Hypertension with heart disease	34.4	40.8	39.4	42.7	45.5
Other diseases of heart	8.7	9.1	9.4	10.1	10.5
Hypertension without mention of heart	4.8	6.6	5.9	6.2	6.3
General arteriosclerosis	5.7	6.1	6.2	6.4	7.0
Other diseases of circulatory system	5.2	4.3	5.4	4.7	4.3
Nephritis and nephrosis	8.8	12.5	9.9	11.2	12.6
Pneumonia	10.5	12.2	14.1	18.3	18.1
Influenza	.3	.2	1.4	4.2	2.5
Ulcers of stomach and duodenum	4.2	4.5	4.9	5.0	4.9
Appendicitis	1.5	1.4	1.3	1.4	1.6
Hernia and intestinal obstruction	4.5	4.8	4.1	3.9	3.9
Gastritis, duodenitis, enteritis, etc.	2.7	3.0	2.5	2.4	3.0
Cirrhosis of liver	9.8	9.3	10.0	10.5	10.3
Diseases of the gall bladder and biliary ducts	3.6	4.6	3.3	3.7	3.5
Complications of pregnancy, childbirth	1.3	1.0	1.0	1.3	1.6
Congenital malformations	2.7	2.9	2.9	3.1	3.5
Suicide	5.6	6.0	5.7	6.0	6.6
Homicide	2.7	3.1	2.3	2.9	3.3
Accidents—total	42.3	50.6	36.3	36.8	40.3
Motor vehicle	15.2	18.9	14.2	15.1	15.2
Home	6.3	6.9	7.2	7.5	8.5
Occupational (civilian)	3.2	3.7	2.5	3.4	3.9
War deaths—enemy action	.6‡	2.7	4.5‡	2.1	2.5
All other causes	50.1	55.3	56.0	53.5	51.3

*The rates for 1954 are provisional.
†Persons insured under Weekly and Monthly premium-paying policies.
‡The recorded mortality from war deaths in 1954 results from the payment of claims on policyholders originally reported as missing who have recently been declared officially dead.

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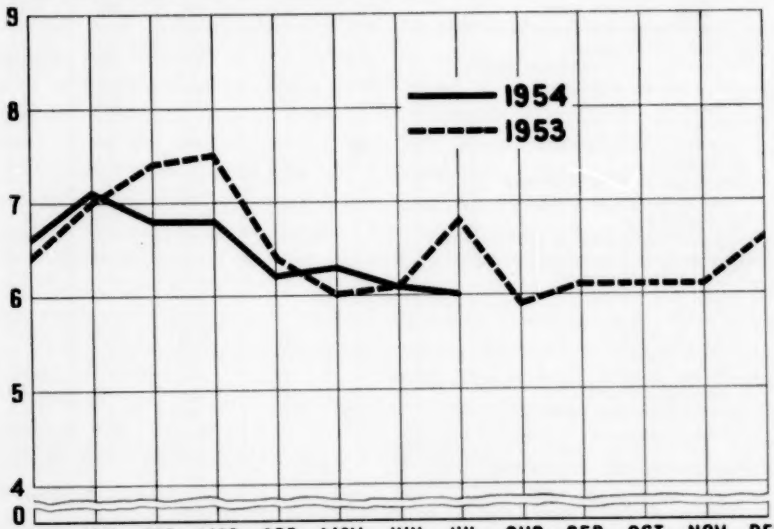
MORTALITY FROM ALL CAUSES

**METROPOLITAN LIFE INSURANCE COMPANY · INDUSTRIAL PREMIUM-PAYING BUSINESS
WEEKLY AND MONTHLY COMBINED**

DEATH RATES PER 1,000 POLICYHOLDERS · ANNUAL BASIS



(DEC)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1953	7.0	7.4	7.5	6.4	6.0	6.1	6.8	5.9	6.1	6.1	6.1	6.6
1954*	7.1	6.8	6.8	6.2	6.3	6.1	6.0					

1954 figures are provisional
**See footnote ‡ in table on page 11*

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